Welcome to use our product.

Thank you for your trust

Please read this instruction manual before installation.

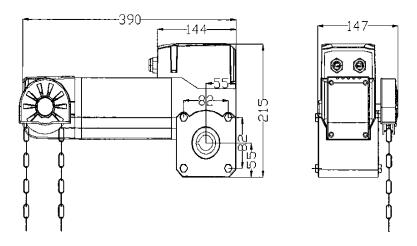
And keep it properly after the installation is done.

# **Industrial Door Operator Performance Parameter List**

TYPE(AC380V)	GYS150		
Rated Power	850W		
Starting Torque	150N.m		
No-load Operation Time	10min		
Thermal Protection	120℃		
Temperature			
reduction ratio	1:58		
No-Load Rotating Speed	24r/min		
Type of Lubricate	Oil Immerged		
Noise	≤55dB		
Type of Manual Chain	Standard chain type		
Maxi Limiting Distance	20 rounds by output shaft		
Diameter of the Hole of	Ф25.4mm		
Output Shaft			
Use Environment	-20°C~+45°C		
Duty Cycle	S2 20% (continuous running with		
Duty Cycle	load no more than 10min)		
Protection Classification	1P44		

#### GYS150 SERIES DOOR OPERATOR FOR INDUSTRIAL USE

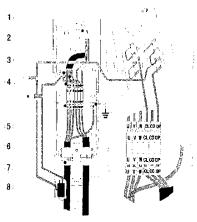
# **Dimension of Industrial Door Operator**



# Wiring of Industrial Gate Operator

Put cable (electrical control accessories) through water joint of the door operator and connect it with terminals inside the door machine in accordance with instructions marked on code pipe.

Below wiring diagram is applicable for GYS150:



- 1. Limit switch
- 2. Motor's thermal protection line (white)
- 3. Motor line:
- U (blue), V (brown) and W (black)

4. Code pipe 5. Water joint 6. Hand chain protection switch (NC)

7. Cable of motor: blue (U), blown (V), black (W) and bicolor of yellow and green 8. Cable of limit switch: close limit-CL (red), common-CO (white), open limit switch-OP (green)

# GYS01 control box for GYS100/GYS150 wiring instructions

1. AC380V Power Input (X1): E(ground electrode), L1(Live), L2(Live), L3(Live), N(Neutral)

2. Motor port (X1): U, V, W, E (ground electrode)

Motor (blue line)

Motor (brown line)

Motor (black line)

3. Power light: LED1

4. Limit switch port

Open limit port (green line) to OP

Limit the common line (white line) to CO

Closed limit port (red line) to CL

5. Infrared port:

Infrared and safety edge signal port: PT and CO

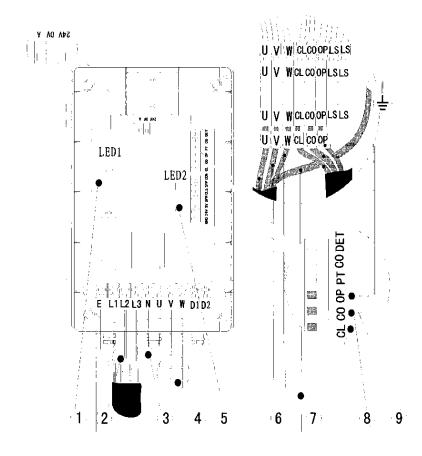
6. Remote control Learn button AN1

#### 7. DIP switch select

1	ON	Auto close mode	
	OFF	Auto close not enable	
2	ON	Down dead-man mode	
	OFF	Down continue	
3	ON	Auto close time 7 seconds	
	OFF	Auto close time 20 seconds	

### GYS01 control board functional program (AC 380V)

Wiring of external power supply, motors and limitations of 3 phase control box GYS01, shall be in accordance with below diagram.



- 1. 3 phase power lines L1, L2 and L3
- 2. Power supply Neutral line N,
- 3. Motor line (U blue, V brown and W black)
- 4. Water joint
- 5. Bicolor of yellow and green earth connecting line E
- 6. Closing limiting line (CL red)
- 7. Common limiting line (CO white)
- 8. Opening limiting line (OP green)

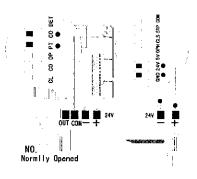
#### Attention:

- 1. After tightening the screws into terminal board, slightly pull the wire ends by several times so as to check whether wires were firmly fixed. Water joint must be tightened after wiring so as to fix all cables. Plastic caps of the door machine and top cover of the control box shall never be placed until the above steps were check in good condition, then the cables shall be fixed on wall.
- 2. If there were any maintenance needed by the external circuit, phase sequence shall be checked in case its variation will cause the door machine driving reversely. If it did, before power-on, you can simply use the manual chain or quick releasing function to release the door and lift it up by 1 meter high above the floor level, then check whether the movement direction of the door has been changed, once there were any unusual or different moving direction, you can settle it by adjusting the wiring phase sequence of house-service wires L1 and L2.

# Wiring of External Components

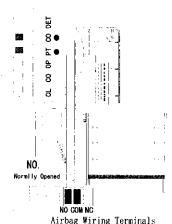
#### 1. Infrared Switch:

Its signal line shall connect to PT and CO (infrared output signal is N.O.), connecting with GND and 24V power supply;



# 2. Safety Edge Switch:

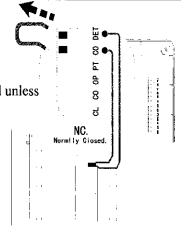
Connecting to PT and CO (The safety switch is N.O.)



#### GYS150 SERIES DOOR OPERATOR FOR INDUSTRIAL USE

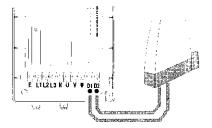
#### 3. Door in Door Switch:

Connecting to wire DET and CO
(The switch signal is N.C.). Connection
of door in door switch will not be allowed unless
the short connected jumper between
DET and CO had been removed.



### 4. AC220V Alarm Light:

It can be connected to D1 and D2.

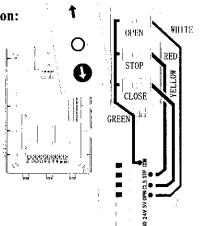


NO. Normily Opened

### 5. External Wired Three-Channel button:

It should be connected with lines of OPN, CLS and COM (The switch signal is N.O.).

The white line, shall connect with OPN; the yellow line, wires to CLS; the red line, wires to STP; and the remaining green line is a common, it shall be wire with COM.



#### 6. External Receiver:

to A of X5.

24V OV A The external receiver is connect to X5 of Control board. The receiver power supply Connect to 24V and 0V of X5. The output of receiver connect



#### Setting and debugging of the control box

After wiring is done, please check careful whether the installation is firm and the wiring is correct. After the wiring is confirmed to be correct, the debugging can then be started.



# Program/Learn the transmitter

1. Open the control box and press the button ANI located on the main control board in the control box. The indicator LED2 will flash once. Press the remote control button (usually it should be Button 1) on the remote control transmitter and the indicator LED2 will flash once again. Immediately press the same remote control button one more time to make the indicator LED2 flash for 4 seconds at a frequency of 1/2 Hz. Afterwards, the indicator goes out and the learning process of the remote control transmitter is finished.

### 2. Adding extra remote controls:

If it is required to adding another transmitter, repeat the above step. It is possible to allow maximum 25 transmitters to learn. This transmitter is of a 3-button mode (i.e., Button 1 for OPEN, Button 2 for CLOSE and Button 3 for STOP).

#### GYS150 SERIES DOOR OPERATOR FOR INDUSTRIAL USE

#### 3. Erase remote control:

Hold the button AN1 located on the main control board, the LED2 remains on for a while. Release the button when the LED2 automatically goes out. By so doing, none of the originally workable remote controllers can remain in control. However, the users can redo the learning process of the remote transmitter whenever necessary.



Attention: it is advisable that users shall remove all the settings of any original passwords before giving new settings of passwords, which guarantees safer use.

1. Screws shall be tightened into terminals by using of screwdriver. Attention: For wires connected onto terminal board, slightly pull the wire ends by several times so as to check wires were in position and well fixed.



2. Tightening the water joint after wiring so as to fix all cables.

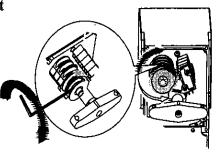
# Adjustment to the limit switches Structure of limit switches

- 1.2 Cams for open limit switch (green)
- 3.4 Cams for close limit switch (red)
- 5.6 Open limit sensitive switch
- 7.8 Close limit sensitive switch



# 1) Setting of the door-shut limit

Close the door electrically to the desired position and press the button "STOP" on the control box to stop the door. Observe the rotational direction of the red cam during the door-shut (see the following picture) and when the door stops, manually turn the two red cams alongside



that direction until the limit switch is pressed and a "click" is heard. Fasten with an inner-hex spanner the screw located in the center of the copper nut to secure the red cams in position.

# 2) Setting of the door-open limit

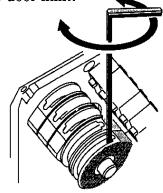
Using the same method, open the door electrically to the desired position and press the button "STOP" on the control box to stop the door. Observe the rotational direction of the green cam during the door open and, when the door stops, manually turn the green cams alongside that direction until the limit switch is pressed and a "click" is heard. Fasten with an inner-hex spanner the screw located in the center of the copper nut to secure the green cams in position.

# 3) Precise adjustment to the limit

Commission the door and check whether the limits for open and close meet the requirements. Readjustment or fine adjustment can be done if the desired effect is not realized.

2) Precise adjustment to the close-door limit:

Turn the fine-tune screw for the red cams clockwise or counter clockwise (see in the right-hand picture). Observe the direction of the cam's slight movements. The conformity of the direction of the slight movement and the original direction of the cam indicates earlier door-close limit and



the door-close position will be higher. Otherwise, the door-close position will be lower. Generally, a 90 degree turn of the inner-hex spanner will result in a difference in door-close position of approx. 25mm.

**Precise adjustment to the open-door limit:** with the same method, turn the fine-tune screw for the green cams with an inner-hex spanner until the desired door-open position is obtained.

# Use of manual operating chain

When it is necessary to operate the door machine manually, the loop chain will be used. It is advisable to operate the chains with even and continuous force. Sudden jerk of the chain shall be avoided to avoid the damage to the manual



mechanism. Pull the chain to realize the opening and closing of the door. During the pull, the protective switches located in the manual chain mechanism automatically cuts off the power to avoid accidents. Once the chain is released, the manual chain mechanism will automatically restore to its original position and the industrial door machine is restored to the normal power-driven status. When the loop chains are not in use, please secure the chains on the wall as per the following picture.

After a period of use, if the manually operated chain can't smoothly open or close the door, finely tune the adjusting handle on the manual chain mechanism clockwise (shown in the above picture) to increase the friction until the chain can normally open the door.



#### Notes:

1. After use of the chain, if the door-close indicator on the control box keeps flashing, the door can't be opened or closed with electric driven method. This is because the protective switch in the manual chain mechanism has not yet restored to its normal position. To tackle this

problem, simply pull the chain slightly up and down until the said indicator goes out to enable normal functioning of the control box.

- 2.During the power-driven door-close, it is prohibited to pull the chain, so as to avoid occurrence of any accidents.
- 3. The manual operating chain can be used only in specific circumstances such as power failures and can't never be used as a long-term normalized practice.

Note: check every month for the chance of the journey of the door upon open and close. See whether the limits are reliable, whether the door is properly balanced and make timely adjustment. When necessary, repairs and adjustment shall be done by professionals.

# Packing list

Main	Unit Package (GYS150)	)	
S/N	Name	Quantity	Remarks
1	Main unit	1SET	
2	Installation bracket	1 PC	
3	Securing sleeve	2 PCS	
4	Specific purpose spanner	1 PC	
5	Flat key	1 PC	
6	External hex. blot M10X20	4 PCS	2 pieces are already fixed on the main unit upon delivery.
8	Set screw M8X10	2 PCS	Mounted on the securing sleeves upon delivery.
9	Instruction for Users	1 PC	

IF YOU HAVE ANY QUESTIONS IN PURCHASE, DISTRIBUTION AND SERVICE, PLEASE CONTACT US.

UAB "EUROLAIKAS"

OZO STR. 20 - 11, LT - 07151 VILNIUS

TEL.: +3705 2463333